Commonwealth Bureau of Census and Statistics,
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CENSUS OF THE COMMONWEALTH OF AUSTRALIA.

4th April, 1921.

CENSUS BULLETIN No. 26.

Summary for Tropical Australia.

(*Subject to Revision.*)

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of State for Home and Territories

BY

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TROPICAL AUSTRALIA.

(*Note.*—The population mentioned herein does not include full-blood Aboriginals.)

SECTION 1.—INTRODUCTION.

1. General.—This bulletin presents in tabular form a summary of the results ascertained at the Census of the 4th April, 1921, relating to the people in the tropical portion of Australia. Particulars are given of the following matters in the order indicated :—(1) Ages ; (2) Length of Residence ; (3) Conjugal Condition ; (4) Birthplace ; (5) Nationality ; (6) Race ; (7) Occupation ; (8) Grade of Employment ; (9) Cause of Unemployment ; (10) Duration of Unemployment ; (11) Religion ; (12) Education ; and (13) Schooling.

The tables containing the Census results are preceded by some observations of a general character relating to the tropical parts, and some comparisons between the vital statistics of those parts and other parts of Australia. Some observations on tropical diseases in Australia are given also.

SECTION 2.—AREA AND POPULATION.

1. General.—That part of Australia which is north of the Tropic of Capricorn comprises 1,149,320 square miles, or nearly 40 per cent. of the whole area of Australia, and on the 4th April, 1921, contained 190,862 persons—representing about 3½ per cent. of the total population. Of the 190,862 persons in the tropical areas of Australia, 181,397, or 95 per cent., were in Queensland ; 5,691, or 3 per cent., were in Western Australia ; and 3,774, or 2 per cent., were in the Northern Territory. From these proportions it is obvious that the conditions in Queensland have a predominant effect on any results relating to the whole area. The portion of Queensland which is within the tropics represents 54 per cent. of the total area of that State and approximately 24 per cent. of its population. The similar proportions for Western Australia were :—area 37 per cent., and population 1.7 per cent. ; and for the Northern Territory they were—area 81 per cent., and population 98 per cent.

The following table shows the number of persons in Tropical Australia at each Census since 1881. Relatively to the total population of Queensland there were in the tropical parts 26.25 per cent. in 1881 ; 27.68 per cent. in 1891 ; 29.32 per cent. in 1901 ; 25.94 per cent. in 1911 ; and 23.93 per cent. in 1921. The proportion of the total population of Australia which was in the tropics rose from 2.67 per cent. in 1881 to 4.10 per cent. in 1901, but fell to 3.51 per cent. in 1921.

Population of Tropical Australia.
(Exclusive of full-blood Aboriginals.)

Date of Census.	Population of the Tropical Portion of—			Total Population of Tropical Australia.
	Queensland.	Northern Territory.	Western Australia.	
4th April, 1881	56,041	3,451	661	60,153
6th April, 1891	108,986	4,898	3,711	117,595
1st April, 1901	145,982	4,096	4,664	154,742
3rd April, 1911	157,112	3,310	4,998	165,420
4th April, 1921	181,397	3,774	5,691	190,862

2. Density of Population.—Over the whole of the tropical area of Australia the density of population was one person to about every 6 square miles ; in the tropical part of Queensland it was about one person to every 2 square miles ; in Western Australia it was one person to every 64 square miles ; and in the Northern Territory it was one person to every 113 square miles.

3. Location of Population.—Of the total population in the tropical parts of Queensland 40 per cent. was in the immediate vicinity of the coastal towns, of which Rockhampton (population 26,684) and Townsville (population 21,669) are the more important. A further 5½ per cent. was in the mining town of Charters Towers. It may be stated that more than 60 per cent. of the males and over 65 per cent. of the females in the tropical areas of Queensland are located on the littoral. In Western Australia nearly 70 per cent. of the persons in the tropical regions were in the coastal towns or on board ships. The latter for the most part were engaged in the pearling or fishing industries. Similarly nearly 40 per cent. of the persons in the tropical parts of the Northern Territory were at the port of Darwin.

4. Masculinity.—At the Census of 4th April, 1921, there was in every 100 persons in Australia an excess of males over females of 1.66. For the whole of the tropical areas of Australia the corresponding masculinity index was 16.36 ; for the Queensland portion it was 14.14 ; for the Western Australian portion it was 67.63 ; and for the Northern Territory 46.16. The large proportion of males in the population of these regions does not necessarily indicate any prejudicial effect of the climate on women, but rather points to

the fact that the industries of these remote parts and the general social conditions do not yet offer suitable surroundings for women and children. This is borne out by the fact that in the towns, where social conditions suitable to family life prevail, the sexes are more nearly equal in numbers. In Rockhampton, with its population of 26,000, there was an excess of females equal to 3.27 per 100 persons. In Townsville, which is situated about the 20th degree of latitude, there was an excess of males of only 3.38 per 100 persons.

The masculinity of the tropical area of Australia as a whole is now about the same as it was in New South Wales in 1850 and in Victoria between 1860 and 1865.

SECTION 3.—VITAL STATISTICS.

1. Introduction.—The data necessary for a direct and complete comparison of the relative healthiness of the tropical portion of Australia with the non-tropical parts are not readily available, but as nearly 25 per cent. of the population of Queensland is within the tropics, it might be presumed that any very marked unhealthiness of the tropical regions would leave its impress on the vital statistics of that State. From the results given hereafter it will be seen that Queensland compares very favorably with Australia as a whole. It is possible, however, to compare a few facts derived from the records for the four Registration Divisions comprising the whole of that part of Queensland which is, roughly, north of the 22nd degree of south latitude, with similar facts for the rest of Queensland, and for Australia as a whole. The comparable facts which are available, though limited in number, are of considerable pertinence in their bearing on health indexes. They are presented in the following table.

The four northern divisions of Queensland referred to represent about four-fifths of the tropical area of Queensland and about two-fifths of the whole of Queensland. At the Census of 4th April, 1921, they had a population of 74,080 males and 55,041 females, a total of 129,121 persons. These people represented 71.5 per cent. of all males and 70.7 per cent. of all females in the tropical area of Queensland; and 18.6 per cent of all males and 15.4 per cent. of all females in the State of Queensland. The similar proportions for both sexes together were—of Tropical Queensland 71.2 per cent., and of the State of Queensland 17.1 per cent.

Registration Divisions of Queensland situated wholly within the Tropics compared with the other part of Queensland and with the whole of Australia.

Particulars.	Annual Average.	
	1910–12.	1920–22.
Births per 1,000 females aged 15–44 years inclusive—		
Four Registration Divisions of Queensland within the tropics	135	141
Balance of Queensland	126	114
Whole of Queensland	127	118
Australia	117	107
Infantile Mortality (Deaths under one year per 1,000 births)—		
Four Registration Divisions of Queensland within the tropics	60	55
Balance of Queensland	68	56
Whole of Queensland	67	56
Australia	72	63
Male Death Rate (Crude) per 1,000 living—		
Four Registration Divisions of Queensland within the tropics	14.05	14.00
Balance of Queensland	11.41	10.61
Whole of Queensland	11.94	11.23
Australia	11.95	11.03
Female Death Rate (Crude) per 1,000 living—		
Four Registration Divisions of Queensland within the tropics	8.66	7.90
Balance of Queensland	8.65	8.03
Whole of Queensland	8.65	8.01
Australia	9.50	8.66
Death Rate (Crude) per 1,000 persons living—		
Four Registration Divisions of Queensland within the tropics	11.84	11.40
Balance of Queensland	10.12	9.37
Whole of Queensland	10.44	9.71
Australia	10.77	9.87

2. Birth Rate.—The first item in the table shows that during the three years 1920–1922 the number of births per 1,000 women of child-bearing age was much higher in the tropical parts of Queensland (141 per 1,000) than in the rest of Queensland (114 per 1,000), which in turn was higher than for Australia as a whole (107 per 1,000). The high birth rate per 1,000 women of child-bearing age is due, to some extent, to the smaller proportion of unmarried women in Queensland, and, presumably, the same applies—perhaps

in a greater degree—to the tropical parts. Nevertheless, the high birth rate in the tropical regions is very satisfactory, especially in view of the very low rate of infantile mortality. In this connexion a comparison of the deaths arising from puerperal condition is, also, of interest. For the ten years 1911–1920 the deaths in Queensland from these causes represented 5.06 per 1,000 births, as against 4.86 per 1,000 births for all other parts of Australia; the rate for Australia as a whole being 4.89 per 1,000 births. In view of all the circumstances (sparsity of population, etc.) the slightly higher rate for Queensland, with its tropical regions, may be considered as very satisfactory.

3. Infantile Mortality.—Perhaps the most striking of the comparisons made is that relating to the infantile death rates. During the three years 1920–22 of every 1,000 children born in Australia 63 died within the first year. Compared with other countries, such a rate is low. In the four wholly tropical districts of Queensland, however, only 55 per 1,000 births failed to survive the year. Ten years previously the position in this regard was, relatively, still more favorable to the tropical regions. It may not be out of place to draw attention to the very great improvement which has taken place throughout Australia, and particularly in Queensland, in the saving of infant life and in the matter of health generally. The improvement is indicated by the following extracts from the Life Tables published in connexion with the Census of 1911. (Census of the Commonwealth of Australia, 1911, Vol. III., pp. 2174 *et seq.*)

Expectation of Life at Birth.

	On the experience of the decade—		
	1881–90.	1891–1900.	1901–10.
	Years.	Years.	Years.
Queensland—Males	41.330	49.512	54.203
Females	49.754	55.800	59.294
Australia—Males	47.199	51.076	55.200
Females	50.844	54.756	58.837

The following infantile death rates are taken from the same source :—

Rates of Mortality under One Year of Age.

	On the experience of the decade—		
	1881–90.	1891–1900.	1901–10.
Queensland—Males	139.90	112.05	90.59
Females	122.13	93.60	74.90
Australia—Males	132.48	118.40	95.10
Females	115.72	101.39	79.53

The above results show the great improvement which was made during the 30 years covered by the table, and it is interesting to observe that from a very inferior position in the earliest decade Queensland shows, in the later period, better results with regard to infant life than those for Australia. Results similar to those given above, for the sexes separately, have not yet been prepared for the decade 1911–20, but for that decade, Queensland, with 21.6 per cent. (at the Census of the 4th April, 1921) of its females of child-bearing age, resident within the tropics, had the most favorable infantile mortality amongst the States of the Commonwealth, the rate for Queensland being 64.35 against an average for the whole of Australia of 67.54 deaths under one year per 1,000 births during the decade mentioned.

From the results for the three years 1920–22, which have already been referred to, it is evident that the improvement is still in progress.

4. Death Rates (Crude).—(*a*) *Males.* The crude death rate for males in tropical Queensland is high. For the years 1920–22 the male death rate for the four tropical Registration Divisions was 14.00 per 1,000 males living, against 10.61 per 1,000 for the rest of Queensland, and 11.03 per cent. for Australia as a whole. On the other hand, the crude death rate for females in the tropics is low. As both sexes should be affected by tropical conditions to something approaching an equal degree, it is apparent that there must be some cause, apart from purely tropical attributes, to account for the unfavorable male death rate. It has already been shown that the masculinity of the tropical population of Queensland is as high as 14.14 per 100 persons. For the four Registration Districts referred to in the preceding table the masculinity is even higher—14.75 per 100 persons. In the Census District of Flinders, with a population of 1,087—in the interior of the tropical region referred to—there was, at the Census of the 4th April, 1921, an excess of males equal to 53 per 100 persons, and in other districts in similar regions the masculinity index was round about 30. Such results suggest that there are many men living under primitive conditions. Under such circumstances there is too frequently a disregard for precautionary sanitary measures, and a reckless neglect of the first symptoms of disease. There are other cases, too, where it is impossible by reason of great distance to procure medical or surgical assistance. It would appear to be mainly to such circumstances as these that the high male death rate in the tropical parts of Queensland is due. Otherwise, the great difference between the mortality of the sexes is not readily explained.

(*b*) *Females.* The crude death rate for females in the tropical parts of Queensland is remarkably low. For the three years 1920–22 the female death rate for the four northern Registration Divisions of Queensland was 7.90 per 1,000 females living, as against 8.03 for the rest of Queensland, and 8.66 per 1,000 for Australia as a whole. An important factor contributing to this very low female death rate in

Queensland, and especially in the tropical parts, is no doubt the low average age of females in those parts. In the tropical parts of Queensland only 11.59 per cent. of females have attained the age of 50 years whereas for Australia as a whole the females aged 50 years and upwards represent 15.51 per cent.

5. General.—The very satisfactory position of the tropical regions of Australia, indicated by the limited comparisons which it has been possible to make, prompts some inquiry as to the influences which have been responsible for such favorable results. Perhaps the most potent influence has been that sort of natural selection which operates in the settlement of all new territories. It may be stated, as a rule, that only the bolder and more virile of any community will venture on the *rôle* of pioneer in new unsettled country, and, when such a new country is a tropical one, to which popular opinion generally ascribes more than the usual discomfort, the physical standard of the settlers is probably more than ordinarily high. With the development of the country and the incidental amelioration of social conditions the less fit will enter the young community, with the result that the average of the physical standard will be lowered. When this general settlement to a social condition approaching more closely the conditions of older communities has come about, statistical results will be on a more fully comparable basis, and it will be then that the full effects of any local influence of climate will show themselves. At the present time, so far as statistical data provide evidence, it appears that the people in the tropical parts of Australia are healthy and virile, and are suffering no serious disabilities from tropical conditions.

Some further comparisons of the death rates for Queensland—which must reflect in some measure the effects of tropical conditions—with those for Australia as a whole are given below. The first table shows the rate of mortality for males and for females for each of the three decades from 1881 to 1910. The results have been taken from the Life Tables, previously referred to, which were published in connexion with the Census of 1911. Similar results for the decade 1911 to 1920 have not yet been computed, but a supplementary table of a similar character showing the death rates for the three-year periods 1910–12 and 1920–22 is given.

The first table following gives the rates of mortality for males and females at each year of age up to 10 years, and at quinquennial intervals from 10 to 100 years for each of the three decades from 1881 to 1910. These rates show that for the first two years of life the death rate in Queensland during the decade 1901–1910 was below the average for the Commonwealth with respect to both males and females. From 2 to 5 years of age the Queensland rates were higher in both sexes than the rates for Australia. They were, however, lower than in Western Australia, where the proportion of the population in the tropics is very much less, but where otherwise the general social conditions as indicated by a high masculinity and a low density of population are somewhat similar. From ages 6 to 32 inclusive the Queensland rates for females were—with the one exception of age 9—equal to or better than the rates for Australia. From 32 years to 39 years the rates were practically equal; from 40 to 68 years the Queensland rates were above the Commonwealth averages; but from 68 upwards they were more favorable. In the proportion of its survivors per 1,000 female births, Queensland consistently takes third place among the six States at each age from 74 upwards. The superiority or equality of the Queensland rates for males broke down at age 11, and from that age to age 69 the rates are less favorable than for the Commonwealth as a whole. From age 70 onward the male rates for Queensland were well below the Australian average, and the survivors at ages 87 to 92 per 1,000 male births were more than in any State except South Australia.

Rates of Mortality per 1,000 Living at each Age Specified.

Note.—The results given below for ages over ten years have been restricted to every fifth year on account of space. The full tables may be found in Vol. III., Census of Australia 1911, pp. 2154 *et seq.*

Age.	Queensland.						Australia.					
	Males.			Females.			Males.			Females.		
	1881–90.	1891–1900.	1901–10.	1881–90.	1891–1900.	1901–10.	1881–90.	1891–1900.	1901–10.	1881–90.	1891–1900.	1901–10.
0 ..	139.90	112.05	90.59	122.13	93.60	74.90	132.48	118.40	95.10	115.72	101.39	79.53
1 ..	41.70	23.46	15.63	38.90	22.43	16.24	34.93	26.36	17.80	33.53	24.76	16.65
2 ..	17.26	10.76	6.86	16.89	10.72	6.72	13.68	9.76	6.75	13.27	9.58	6.29
3 ..	10.97	7.32	4.82	10.54	7.59	4.57	8.87	6.27	4.39	8.30	6.15	4.11
4 ..	8.05	5.67	3.70	7.32	5.79	3.49	6.88	4.96	3.49	6.45	4.87	3.24
5 ..	5.88	4.46	2.85	4.98	4.41	2.67	5.37	3.98	2.81	4.98	3.88	2.58
6 ..	4.48	3.68	2.32	3.54	3.47	2.14	4.32	3.29	2.35	3.91	3.20	2.14
7 ..	3.84	3.36	2.09	2.97	2.94	1.89	3.72	2.90	2.09	3.22	2.78	1.91
8 ..	3.20	2.94	1.96	2.64	2.48	1.75	3.29	2.60	1.96	2.83	2.44	1.75
9 ..	2.64	2.55	1.84	2.35	2.14	1.66	2.90	2.39	1.84	2.60	2.19	1.63
10 ..	2.14	2.14	1.79	2.14	1.89	1.54	2.53	2.25	1.79	2.39	2.00	1.59
15 ..	9.08	4.50	2.85	3.17	2.00	1.89	3.72	2.90	2.55	2.99	2.48	2.19
20 ..	20.87	7.98	4.85	7.39	3.24	2.94	7.14	4.73	3.70	5.28	3.88	3.29
25 ..	17.03	9.17	5.69	8.89	5.14	4.09	8.62	6.17	4.48	7.02	5.33	4.30
30 ..	14.15	9.30	6.47	9.51	6.38	5.08	8.67	6.98	5.19	8.28	6.52	5.19
35 ..	12.36	10.24	7.71	9.35	7.73	6.22	9.51	8.21	6.33	9.01	7.98	6.17
40 ..	13.24	11.38	9.65	10.85	8.21	7.32	11.29	9.69	8.16	10.40	8.37	7.18
45 ..	16.71	12.81	12.17	11.88	8.69	8.46	14.24	11.83	10.83	11.67	9.17	8.07
50 ..	20.49	16.80	16.12	12.81	11.49	9.81	18.61	15.22	13.95	13.99	11.42	9.56
55 ..	25.26	23.08	20.58	16.17	15.38	13.06	24.74	21.07	18.16	18.18	15.42	12.77
60 ..	32.84	29.20	27.30	21.88	21.55	19.92	32.30	30.27	25.84	23.95	22.45	19.20
65 ..	44.46	41.28	41.35	31.48	31.90	32.17	45.82	44.96	38.59	35.50	32.39	29.98
70 ..	60.43	57.22	60.54	44.90	44.04	45.84	64.16	60.54	61.62	52.19	46.72	47.77
75 ..	83.51	86.10	86.92	65.80	70.33	67.99	92.72	90.11	96.10	76.37	76.30	77.79
80 ..	119.28	124.15	127.99	108.93	114.05	107.66	136.46	138.39	137.95	124.47	122.35	113.33
85 ..	170.97	169.37	180.76	160.13	162.68	161.74	188.95	196.29	197.01	187.79	174.63	164.59
90 ..	233.54	220.21	257.58	221.19	213.52	238.03	256.90	258.38	277.36	253.59	239.99	242.21
95 ..	312.55	275.28	357.77	306.38	282.65	340.87	337.23	334.83	381.11	324.87	325.67	341.45
100..	476.76	360.09	516.38	450.76	519.30	489.41	473.92	481.14	525.36	452.82	501.91	500.73

The next table extends to the end of 1922, in a slightly different form, the comparisons between the death rates at various ages for Queensland and for Australia as a whole. From the rates for the period 1920–22 it may be seen that the Queensland results for males up to and including those aged 14 years are superior to the results for Australia. From 14 years to 69 years the Queensland results for males are inferior to the Australian average, though it may be mentioned that for one age-group only (15 to 19) are the Queensland rates the worst among the States. In every other group, between 14 and 69 years, the rate for some State—which is entirely free from, or is affected only to a very slight degree by, tropical influences—is less favorable than the rate for Queensland. From 70 years upwards the Queensland rates are better than the Australian average. The female rates show some peculiar oscillations in relation to the average rates for Australia. For instance, for the age-group 0 to 4 years the Queensland results are better than those for Australia; from 5 to 44 years the Queensland rates are inferior to the Australian average; from 45 to 54 years they turn in favour of Queensland; but from 55 to 64 they revert against that State; and so on. Over all ages, however, the Queensland death rate for females during the period under review was 8.01 per 1,000 living, against 8.66 for Australia. It may be mentioned here, too, that for no age-group is the Queensland rate for females the worst among the States. It might be pointed out, also, that the average rates for Australia at different ages are likely to be affected by conditions more or less peculiar to any of its component States. Further, throughout Australia, and particularly in Queensland and the other less developed States, the age composition of the population has not yet reached a condition of stability, but is subject to material disturbances, by migration, from time to time.

Annual Average Death Rates per 1,000 Living in quinquennial Age-Groups.

Age Group.	1910–1912.				1920–1922.			
	Males.		Females.		Males.		Females.	
	Queensland.	Australia.	Queensland.	Australia.	Queensland.	Australia.	Queensland.	Australia.
Years.								
0– 4..	23.30	24.71	20.07	20.22	20.73	21.64	16.05	17.09
5– 9..	2.39	2.36	2.29	2.04	1.96	2.02	1.89	1.82
10–14..	1.74	1.72	1.45	1.59	1.58	1.59	1.43	1.27
15–19..	2.92	2.52	2.20	2.22	2.90	2.30	1.99	1.90
20–24..	4.83	3.65	3.76	3.53	3.54	3.10	2.81	2.75
25–29..	5.57	4.35	4.68	4.31	4.37	3.70	3.61	3.59
30–34..	5.96	5.20	4.46	4.73	4.58	4.16	4.11	4.06
35–39..	7.54	6.68	5.79	5.97	5.95	5.48	5.80	5.00
40–44..	9.65	8.58	7.11	6.44	7.86	6.89	6.03	5.51
45–49..	13.83	11.58	9.07	7.98	10.60	9.91	6.76	6.87
50–54..	17.77	15.36	11.73	11.07	14.23	12.90	9.11	9.27
55–59..	23.01	21.67	14.13	14.60	20.34	19.04	13.60	12.92
60–64..	31.25	31.38	21.64	21.60	30.36	28.71	19.71	19.05
65–69..	51.53	47.69	34.69	36.47	44.93	43.74	30.81	31.76
70–74..	70.94	70.88	57.82	56.13	64.56	64.88	50.61	50.43
75–79..	112.40	114.04	86.11	95.91	103.32	106.53	88.10	87.81
80–84..	190.89	176.32	138.33	151.89	159.06	160.73	126.40	138.32
85–89..	202.56	257.73	200.82	208.59	227.79	259.17	210.65	221.44
90 and over	272.73	357.11	351.52	334.87	314.96	376.08	288.89	341.68
All Ages ..	11.94	11.95	8.65	9.50	11.23	11.03	8.01	8.66

SECTION 4.—TROPICAL DISEASES.

(From the Official Year Book of the Commonwealth of Australia, No. 15, p. 1008.)

1. General.—The remarkable development of parasitology in recent years, and the increase in knowledge of the part played by parasites in human and animal diseases, have shown that the difficulties in the way of tropical colonization in so far as these arise from the prevalence of diseases characteristic of tropical countries are largely removable by preventive and remedial measures. Malaria and other tropical diseases are coming more and more under control, and the improvements in hygiene which science has accomplished lend an entirely new aspect to the question of white settlement in countries formerly regarded as unsuitable for colonization by European races. In Australia the most important aspect of this matter is at present in relation to such diseases as filariasis, malaria, and dengue fever which, although practically unknown in the southern States, occur in many of the tropical and sub-tropical parts of Australia.

2. Transmission of Disease by Mosquitoes.—(i) *Queensland.* The existence of filariasis in Queensland was first discovered about 37 years ago. The parasite of this disease (and probably of dengue fever also) is transmitted by *Culex fatigans*, the mosquito most prevalent in Queensland. The *Stegomyia fasciata*, conveyer of yellow fever, is another common domestic mosquito throughout Eastern Queensland during the summer. Occasional limited outbreaks of malaria occur in the northern parts of the State; one at Kidston in 1910 resulted in 24 deaths. The infection was traced to newcomers from New Guinea. By an Order in Council the Local Authorities are now responsible for the taking of measures for the destruction and the prevention of breeding of mosquitoes.

(ii) *Other States.* In Western Australia it is stated that malaria is not known to exist south of the 20th parallel, while filariasis has never been discovered. Mosquito-borne diseases are unknown in Victoria, South Australia, or Tasmania, and it is stated that filariasis is uncommon in New South Wales, the only cases known being imported ones. Kerosene and petroleum have been successfully used both by municipalities and private individuals to destroy the larvae of mosquitoes at various places in these States.

(iii) *Northern Territory.* While the Territory is conspicuously free from most of the diseases which cause such devastation in other tropical countries, malaria exists, and, although cases rarely end fatally, the Administration is taking measures for the destruction of mosquito larvae wherever settlements or permanent camps are formed, and precautions are being taken to prevent the collection of stagnant water in such localities.

3. Hookworm.—An investigation made in Papua in 1917 by an officer of the International Board of Health of the Rockefeller Foundation disclosed the fact that half of all natives examined were infected with hookworm disease. In 1918 an investigation was undertaken in Queensland, and the prevalence of the disease and its effects in retarding growth and development were found to be greater than had been supposed. In October, 1919, the Australian Hookworm Campaign was begun. This campaign was supported jointly by the Commonwealth, the International Health Board of the Rockefeller Foundation, the State of Queensland, and the other States in which work in this direction was undertaken. By the end of 1922, the survey of Australia and its dependencies had been completed. The total number of examinations and treatments, including those in Dr. Waite's survey in Papua and the earlier work in Queensland, was as follows :—

People examined for hookworm disease	274,974
Found to be infected with hookworms	54,168 (19.7%)
Treated free by the Australian Hookworm Campaign	111,845*
Found to be cured on re-examination	10,267*

Endemic hookworm infection was found in intermittent areas along the eastern coast of Australia from Cape York to Macksville in New South Wales. The higher summer rainfall in these areas appears to be chiefly responsible for the localization of the infection. It is also found in the vicinity of Broome and Beagle Bay in Western Australia, in the northern part of the Northern Territory, and along the eastern shore of the Gulf of Carpentaria. In the Territory of Papua 59.2 per cent of the natives were found to be infected, and in the Territory of New Guinea 74.2 per cent. There is no endemic hookworm infection in Victoria, South Australia, Tasmania, the interior of Queensland, New South Wales (except the north-eastern part), and Western Australia (except the far north).

Metalliferous mines were examined in Victoria, South Australia, New South Wales, Tasmania, and Western Australia, and were found entirely free from hookworm infection. The examination of metalliferous mines in Queensland showed either no infection or a light infection which may have originated chiefly outside the mines. Coal mines in Victoria, Tasmania, and Western Australia were free of infection. Examinations were made in the coal mines of the Newcastle district, and among 1,226 miners examined in about 25 mines only five infected miners were found. In the Ipswich group of coal mines in Queensland 31.5 per cent. of the miners were infected, and in the Howard-Torbanlea group (Queensland) 75.8 per cent. were infected. Recommendations have been made with regard to the correction of the insanitary conditions responsible for these high infection rates.

Wherever operations are carried on by the Hookworm Campaign, emphasis is placed on the prevention of hookworm disease, in contrast to temporary relief through the curing of existing cases, and much work has been done to improve methods of night-soil disposal and teach the people the danger from soil pollution.

4. Institute of Tropical Medicine, Townsville.—The Australian Institute of Tropical Medicine was founded at Townsville in January, 1910. Since 7th March, 1921, the Institute has been administered by the newly created Commonwealth Department of Health. During the first two years after its establishment the Institute was subsidized by the Commonwealth and Queensland State Governments, and was controlled by a committee consisting of representatives of both Governments and of the three Australian Universities—Sydney, Melbourne, and Adelaide. A director was appointed to organize the activities of the Institute, and after having accomplished a survey of Northern Australia and New Guinea, to advise as to the best centre where the work could be carried out most expeditiously. The staff consisted at first of the director and one laboratory assistant, but soon the necessity arose of appointing an entomologist. In 1913, after two years of preliminary work, the Commonwealth decided to increase considerably the grant to the Institute, and to take over the financial administration, which was vested in the Department of External Affairs, and later in the Home and Territories Department. The representatives of the three universities were retained as scientific advisers. The decision to increase the scope of the Institute was greatly influenced by a resolution passed by the Australasian Medical Congress in Sydney in 1911, recommending an organized inquiry into the various aspects likely to affect the establishment of a working white race in Australia. The increased subsidy made the appointment of a larger staff possible. The services of three qualified assistants were secured, and the Institute was housed in a ferro-concrete building, situated within the precincts of the Townsville Hospital. During the first two years a survey of tropical diseases existent in North Queensland was carried out; the incidence of human and animal parasites was investigated; and a number of problems which required elucidation were attacked. Amongst other suggestions a hookworm survey of Cairns and surrounding districts was recommended. The staff undertook research on "nodules in beef" and made an important discovery, which at first seemed destined to advance our knowledge, by proving that living larvae could penetrate through the unbroken skin of the beast and could be found under special conditions on the surface. Research in the consequent fate of the larvae and the search for an intermediary host, in which the larvae could undergo further development, proved fruitless, although many possibilities, such as biting flies, aquatic insects, etc., were considered and excluded after patient research. It was shown that the parasites of wild animals, such as reptiles, birds, and small mammals, resembled on the whole those found and described from other parts of the tropics, but no new general features of any importance could be discovered. Attention was drawn to the prevalence in the dry western parts of North Queensland of keratosis, a skin disease, characterized by a thickening of the

* Only part of the people treated were re-examined to find out whether they were cured. The total number cured was, therefore, much larger than shown.

horny layer of the skin, which develops into a chronic ulcer, and is apt to give rise to skin cancers. The occurrence of similar conditions in old people with atrophic skin in other parts of the world has been well known, but in Queensland mostly young people become affected, and the condition has been attributed to the effect of sunlight and dry heat on a skin lacking in normal pigment. In the Torres Strait islands, the occurrence and prevalence of such diseases as malaria, filariasis, elephantiasis, yaws and others have been noted. The increase in the staff made more extended field work possible, and in the course of time different districts were visited in order to study the local prevalence of fever and disease. A survey of the whole of the coastal districts of British New Guinea was undertaken and yielded interesting results. The prevalence of the different types of malaria, of filariasis and of leprosy was mapped out, the existence of ankylostomiasis (caused by the American variety of the hookworm, which is widely distributed in the far East) was noted, and the occurrence of a number of hitherto undescribed diseases was observed. Amongst other diseases, a number of cases of gangosa, a condition that occurs not infrequently in some of the Pacific Islands, was encountered, and in the earliest stages of the disease a parasite was discovered which belongs to the genus of Blastomyces and was named Cryptococcus mutilans, on account of the mutilation brought about by it. The etiology of chronic conjunctival affections, so prevalent in Western Queensland, was investigated, and it was proved that true trachoma existed in Western Queensland and that an acute conjunctivitis was the most important predisposing cause. The epidemiology and parasitology of the so-called " Mossman fever " were investigated, and it was found that the disease could be transmitted by direct inoculation of blood of patients in the early stage of the disease into monkeys. This observation indicated that this fever can be separated from other fevers which cannot be transmitted to these experimental animals. A survey of the tropical diseases amongst the Europeans and Aborigines of the Northern Territory was undertaken, and with the exception of yaws and ulcerative granuloma, the comparative absence of any serious tropical disease was established. Malarial fever was almost entirely absent amongst the aboriginal population and, except in a few localities, rarely attacked the European population. Unfortunately the outbreak of the war greatly curtailed the activities of the Institute. The energy of several of the workers was directed towards duties directly connected with the war, and the staff was obliged to assist as far as possible in relieving the tension caused by the scarcity of medical men throughout North Queensland and Australia in general. Prior to the outbreak of the war the staff of the Institute had embarked on an inquiry on a larger scale into the physiological changes of a white race living under such climatic conditions as prevail in the coastal districts of tropical Australia. Special attention was paid to the blood conditions of the white population, to the metabolism and to the influence of exercise, in order to gain an insight into the effects of manual labour upon the human organism under tropical conditions. At the same time the economic conditions as expressed in statistics were studied, and information collected in order to ascertain whether climatic conditions could be held responsible for any alterations of social conditions in North Queensland. An examination of the blood condition of school children, who had resided during the whole or most of their lives in Townsville, was carried out in order to obtain definite evidence whether any deterioration had taken place, in other words, whether there existed amongst the North Queensland school children an anæmia which could be directly attributed to climatic conditions. The result of the investigation proved that the blood condition, as far as formed elements and colouring matter were concerned, did not differ in any way from that considered as normal in children born and bred in a temperate climate. In one respect, however, viz., in the relative preponderance of a certain type of cells—neutrophile leucocytes with a comparatively small number of nuclei—a definite alteration could be ascertained; the significance of this discovery is not yet clear. A biochemical investigation into the metabolism of a white race living in the tropics was undertaken by estimating the different excretory substances in the urine of a number of subjects who had lived for some time in the tropics, and only quantitative variations from the averages obtained in temperate climates have been found. An extensive inquiry into the body temperature of a number of subjects under varying conditions has been carried out, and it was shown that during complete rest the rectal temperature did not show any variations from the limits of those observed in Europe, but a considerable rise was produced by slight muscular work, which rise was maintained for some time after the work had ceased. Further experiments into the gaseous metabolism, the mechanism of sweating, the influence of extreme wet bulb temperatures, etc., have been, and are still being carried on, and will in time furnish definite figures and facts in connexion with the solution of the question of the adaptation of a European race to conditions obtaining in the coastal districts of North Queensland. Researches have been carried out into diseases prevalent in North Queensland such as malaria, sprue, filariasis and others. A malarial survey of Cairns and the Innisfail district has been accomplished, and in the former case definite proposals have been submitted which when carried out faithfully would minimize the incidence of this infection. The staff of the Institute has also taken an active part in the hookworm campaign, undertaken by the Rockefeller Institute. A great deal of work has been done on the parasitic worms of men and beasts, and a great number of genera and species new to science have been described in various publications. General research has not been neglected, and a number of publications dealing with different subjects have been issued by the staff of the Institute. The entomological department has carried out a survey of mosquitoes and biting flies in Northern Australia and parts of British New Guinea. A special journey was made by the entomologist to the irrigation areas of New South Wales and Victoria, in order to ascertain the distribution of anophelines, to which genus the malaria-transmitting mosquito belongs. The purpose of this survey was to advise as to whether the settlement of malaria-infected returned soldiers in these areas would form a menace by setting up conditions for the spread of this disease. Prior to the outbreak of war definite arrangements had been made to hold annually a course in tropical medicine and parasitology, but war conditions made the course impossible. In connexion with the Institute, the Townsville Hospital has set aside two wards containing twenty beds, which are under the direct control of the staff of the Institute, and are reserved for patients suffering from tropical complaints. Since their establishment a number of cases have been admitted, treated, and their complaints investigated; amongst others, a number of returned soldiers and sailors suffering from a severe form of malarial fever were sent to the Institute for observation and treatment. The results of the work of the Institute were published at first

in the form of an annual report, but later in various scientific journals, and have been re-issued from time to time in the form of "Collected Papers," which contain a variety of scientific investigations. The equipment has lately been perfected by installing electric power, and by providing additional accommodation for the breeding of small experimental animals, which are indispensable for the carrying out of scientific research. An extensive library on tropical medicine and other allied subjects has been collected since the inception of the Institute. The Institute extends hospitality to qualified workers who desire to investigate tropical disease or any problems in connexion with Northern Australia, and room and equipment are provided.

Further investigation on the effects of work under tropical conditions has been carried out on wharf labourers working cargo in the holds of vessels in Townsville during the summer months. These were controlled by readings of the dry and wet bulb thermometers and the katathermometer, both in the holds of ships and on the wharf, and at the same time rectal temperatures, blood pressure, and pulse rate were taken. This investigation showed that climate has practically no effect on working men in the tropics. Further work on blood conditions in reference to the neutrophile leucocytes was carried out, this time on hookworm-infected children, and the results show that this infection has a definite effect in the blood formation and destruction. Work on the transmission of the dog filaria (*Dirofilaria immitis*) has been carried out, and it has been shown that dog fleas, as well as mosquitoes, are capable of acting as intermediate hosts. An extensive statistical inquiry into prevalence of diseases, birth rates, and death rates in Queensland in comparison with Victoria and Tasmania was undertaken, and the result shows that Queensland is not more unhealthy than the southern parts of the continent. An examination of fæces from a number of healthy individuals showed that there are a considerable number of carriers of *Entamœba histolytica* (the dysentery amœba) in North Queensland; although there is practically no evidence that they cause disease, the findings are on the whole the same as in England In the Entomological Department considerable work has been done in extending knowledge of the distribution and breeding habits of mosquitoes and March flies. A physiologist has begun work on the effects of the climate on apparently healthy individuals, in regard to metabolism.

SECTION 5.—AGES (Table 1).

1. General.—Table 1 gives the ages in quinquennial groups of the males and females separately, and of the total persons in each of the three divisions of tropical Australia. The table hereunder presents a condensed summary showing the percentage of minors and adults according to sex for the whole of the tropical area compared with the whole of Australia. These results show a very considerable difference in the age constitution of males as compared with females in the tropical area, and of both males and females in the tropical areas as compared with the whole of Australia. For Australia as a whole the minors represent about 42 per cent. both of males and of females, whereas in the tropical areas 36.5 per cent. of the males and 48 per cent. of the females are under 21 years of age; the proportion for both sexes together being 41.3, as against 42.1 for Australia.

Percentage Proportion of Minors and Adults.

	Whole of Australia.			Tropical Australia.		
	Males.	Females.	Persons.	Males.	Females.	Persons.
	%	%	%	%	%	%
Under 21 years	41.94	42.24	42.08	36.53	47.98	41.33
21 years and over	58.06	57.76	57.92	63.47	52.02	58.67
	100.00	100.00	100.00	100.00	100.00	100.00

The large proportion of adult males, as compared with the whole of Australia, is due to the relatively large number of unmarried men of working age in the tropical area, a feature which is common to all undeveloped territories. With the females the position is reversed, the proportion of females under 21 years being much higher than for the whole of Australia. The reason for this high percentage of young females is not at once apparent, but it is largely due, doubtless, to the small proportion of unmarried women, which implies that the number of children—the usual proportion being females—is greater per adult female than where single women are relatively more numerous. In the tropical areas the proportion of females over 15 years of age who were not married was 41.5 per cent., as compared with 45 per cent. for Australia. Further, the number of women beyond the child-bearing age is relatively very small. Of all women over 20 years only 29 per cent. were over 45 years, as against 34½ per cent. for Australia; whereas the most prolific ages—from 20 to 30 years—represented 35.4 per cent., against 29.5 per cent. for Australia. It is not possible from the data available to state definitely the cause of the small proportion of females over 45 years, but it is probably due in some measure to the relatively recent extension of settlement by comparatively young people who have not yet had time to grow old.

It may be seen, however, from the results given in paragraph 5 of section 3 that for the State of Queensland the female mortality is particularly favorable, so that it is a reasonable inference that the mortality rates were not prejudicially affected by the tropical conditions under which 22 per cent. of all females in the State were living.

SECTION 6.—LENGTH OF RESIDENCE IN AUSTRALIA (Table 2).

1. Australian Born and Immigrant Population.—It must be noted that the figures in Table 2 relate to the length of residence in Australia (not to the length of residence in tropical parts of Australia—except where the periods are identical) of persons who were born outside Australia. In the tropical parts the proportion of Australian born is much lower than in the non-tropical parts. Of the

persons counted at the Census of the 4th April, 1921, in tropical Australia 25 per cent. were born outside Australia altogether, whereas for the rest of Australia the proportion born outside was only 15 per cent. Of the males in the tropics 30 per cent. were born outside Australia, and of the females 18 per cent. For Australia as a whole the similar percentages were—males 17 per cent., and females 13 per cent. This high proportion of the ex-Australian element is, to some extent, due to the numbers of Asiatics, many of whom are engaged in the pearling and other fishing industries.

2. Length of Residence.—Taken in decennial periods the largest number of the immigrant people at present in these parts has been resident in Australia from 30 to 39 years. These people represent some part of those who entered Australia during the "boom" times of the eighties. It is interesting to notice that of the survivors of those persons who came to Australia during the eighties, 8.23 per cent. are in the tropics, though the tropics contain only 3.51 per cent. of the population of Australia. The large numbers shown with a length of residence from 5 to 14 years are composed of those persons who arrived in Australia mainly during the years 1909 to 1913, when immigration to Australia was again active. With regard to the persons whose length of residence is shown as less than one year it may be mentioned that the number of these is always relatively high, as it includes the crews of vessels, oversea travellers, and other temporary sojourners. It is probable, too, that some of those whose length of residence is shown as between one and two years are persons engaged for short terms for the pearling industry.

SECTION 7.—CONJUGAL CONDITION (Table 3).

1. Married and Never Married.—Of the total population at the Census of 1921, 62.9 per cent. had never been married, as against 58.59 per cent. for Australia as a whole. Of the males in the tropics 66.7 per cent., and of the females 57.5 per cent., had never been married. For Australia the similar percentages were—males 60.9, and females 56.2. To satisfactorily compare the conjugal condition of communities in the tropics with the rest of Australia it is necessary to take into consideration the age constitution in each case. In the tropical parts of Australia the married males represented only 47.7 per cent. of adult males, as compared with 63.0 per cent. for the rest of Australia. The married females on the other hand represent 58.4 of the females over 15 years of age in the tropics, as against 54.7 for the non-tropical parts. From the figures in Table 3 it may be seen that the number of married men (33,645) was in excess of the number of married females (29,500) to the extent of 4,145, or 14.05 per cent.

2. Widowed Persons.—The number of widowed persons in the tropics represented 3.85 per cent. of the total population, as against 4.39 per cent. for Australia. The number of widowed males in the tropics represented 2.77 per cent. of all males, as against 2.66 per cent. for Australia; and the number of widowed females represented 5.34 per cent. in the tropics, as against 6.17 per cent. for Australia.

3. Divorced Persons.—The number of divorced persons numbered 142, or 7 per 10,000 of the total population, as against 15 per 10,000 for Australia as a whole. The divorced males in the tropics represented 9 per 10,000 of all males, and the divorced females 5 per 10,000 of all females.

SECTION 8.—BIRTHPLACES (Table 4).

1. Born in Australia.—Of the total population of Australia as a whole, 84.58 per cent. were native born. In the tropical parts of Australia the proportion of Australian born was only 75.27 per cent. Of the males in the tropics the proportion of Australian born was still less, being 70.45 per cent., against 82.62 per cent. for Australia. Of the females in the tropics 81.97 per cent. were born in Australia, as compared with 86.61 per cent. in Australia as a whole.

2. Born in Europe.—As the proportion of the Australian born in the tropical regions was low, the proportion born in Europe was correspondingly high. About 83 per cent. of those born in European countries were natives of the British Isles, who represented 17.02 per cent. of males; 15.19 per cent. of females; and 16.25 per cent. of all persons in the tropical parts of Australia. The similar percentages for Australia of persons born in the British Isles were:—Males, 13.41 per cent.; females, 11.51 per cent.; and persons, 12.47 per cent. Of other European countries Italy was the birthplace of 1,167 males and 364 females; Germany provided 999 males and 412 females; and Denmark 532 males and 180 females. The numbers born in other European countries were small.

3. Born in Asia.—The number of persons in the Australian tropics who were born in Asia numbered 7,163, of whom 6,886 were males and 277 were females. These males represented 6.23 per cent. of the total male population of the tropics, as compared with less than 1 per cent. for Australia as a whole.

4. Born in Polynesia.—The number of persons who were born in Polynesia was 639; of whom 570 were males.

SECTION 9.—NATIONALITY, i.e., ALLEGIANCE (Table 5).

1. British Subjects.—Of the 190,862 persons in the tropical parts of Australia the nationality was stated in respect of 190,743, of whom 181,933—or 95.4 per cent.—were of British nationality. For Australia as a whole the British element represents over 99 per cent.

2. Foreign Nationalities.—The foreign nationalities most largely represented in the tropics are as follows. The figures in parenthesis indicate the proportions per cent. which the figures for the tropics bear to the similar figures for Australia:—Chinese, 3,020 (21.95); Japanese, 2,061 (77.98); Italian, 758 (15.60); Dutch, 730 (45.63); Greek, 401 (14.48); Russian, 353 (15.10); German, 303 (8.76).

SECTION 10.—RACE (Table 6).

1. Distribution.—At the Census of the 4th April, 1921, the population of the tropical parts of Australia comprised 178,638 persons of European race; 9,652 persons of non-European race, full blood; and 2,572 half-castes, *i.e.*, persons of whom one parent was of European race and the other non-European. Combining the full bloods and the half-castes, the total non-European population represented 6.41 per cent. of the total. Of the total full-blood non-European population of Australia (30,812) 31.33 per cent. were in the tropical regions, and of the total non-European half-castes (17,499) 14.70 per cent. were in the tropics.

2. Non-Europeans.—(*a*) *Full blood.* Of the full-blood non-Europeans in the tropics the most numerous were the Chinese, who numbered 3,449 males and 301 females. Of Japanese, there were 1,982 males and 132 females, who together represented 77.2 per cent. of all the Japanese in Australia. Of the 2,114 full-blood Japanese in the Australian tropics, 1,084 were in Western Australia; 994 were in Queensland; and 36 in the Northern Territory. These people are engaged mainly in the fishing and pearling industries. The Polynesians numbered 1,474, being 62.6 per cent of the total in Australia. The Polynesians in the tropical parts of Australia were practically all in Queensland. The Malays in the Australian tropics numbered 978 of a total of 1,083 in Australia as a whole. Of the Malays who, like the Japanese, are largely employed in the fishing industries, 554 were in Western Australia; 404 were in Queensland; and 20 in the Northern Territory. (*b*) *Half-castes.* The 2,572 half-castes in the tropics of Australia represented 14.7 per cent. of all the half-castes in Australia. Of those in the tropics, 1,668, or 64.9 per cent., were half-caste Australian Aboriginals; 510, or 19.8 per cent., were half-caste Chinese; and 121, or 4.7 per cent., were Polynesians.

SECTION 11.—OCCUPATION (Table 7).

1. Breadwinners.—Of the total population in the Australian tropics at the Census of 1921, 91,745, or 48.3 per cent., were breadwinners. Male breadwinners numbered 79,815, or 72.3 per cent. of all males, and female breadwinners numbered 11,930, or 15.0 per cent., of all females. For Australia as a whole the proportion of males who were breadwinners was 67.6 per cent., and of females 17.4 per cent.

2. Class of Occupation.—(i) *Primary Producers.* The most numerous of the occupational classes in the tropics was the primary producers' class. At the Census of 1921 this class numbered 35,941 persons, and represented 39.2 per cent. of all breadwinners, as compared with 25.8 per cent. for Australia. Those engaged in agriculture numbered 13,216; while the pastoral industries employed 12,859; and mining and quarrying 5,318. (ii) *Industrial.* The industrial class numbered 22,406 persons, or 24.4 per cent. of all breadwinners. Of these, 10,363 were definitely stated to be engaged in manufacturing industries; and 7,687 were classed as "undefined industrial." The group "undefined industrial" includes all persons engaged in any capacity in works of utility, or in connexion with the manufacture, construction, or modification of materials, and who have not indicated the particular industry with which they were associated. Some of the principal indefinite designations included in this group were "labourer," "mechanic," "engine-driver," "manager," "foreman." (iii) *Transport and Communication* employed 9,531 persons, or 10.4 per cent. of all breadwinners. (iv) *Commercial Classes* employed 9,418, or 10.3 per cent. (v) *Domestic Classes* employed 8,288, or 9.0 per cent.; and the *Professional Classes* 5,694, or 6.2 per cent.

SECTION 12.—GRADE OF EMPLOYMENT (Table 8).

1. Nature of Data. Under the heading of Grade of Employment are given particulars concerning the number of persons employed in different capacities in the various branches of industry. The grades under which the statistics are published are five in number, viz.:—(i) Employer; (ii) Working on own account; (iii) Assisting, but not receiving wages or salary; (iv) Receiving wages or salary; (v) Unemployed. In addition to these categories, provision is made for (vi) Grade not applicable, which consists mainly of dependants, and persons of independent means not engaged in gainful occupations; and (vii) Grade not stated.

2. Comparison with Australia.—The following table gives a comparison between the results for the tropical parts of Australia and Australia as a whole, relating to grade of employment of those persons to whom the term is applicable:—

Proportion per cent. in each Grade.

Grade.	Tropical Australia.			The Whole of Australia.		
	Males.	Females.	Total.	Males.	Females.	Total.
	%	%	%	%	%	%
Employer	6.51	3.40	6.11	7.41	2.41	6.41
Working on own account	17.22	10.30	16.34	17.00	10.56	15.71
Assisting, but not receiving wages or salary	0.97	0.75	0.95	1.81	0.81	1.61
Receiving wages or salary	59.40	79.15	61.92	65.88	81.31	68.97
Unemployed	15.90	6.40	14.68	7.90	4.91	7.30
Total	100.00	100.00	100.00	100.00	100.00	100.00

With the exception of the unemployed—which is frequently affected by local temporary causes—there is no striking difference between the two sets of figures. In considering the proportion of the community who belong to the wage and salary earning class, it is necessary to include in that group the numbers who were unemployed at the time of the Census, since these persons are ordinarily earners of salary or wages. If, therefore, those receiving wages and salary be taken together with the unemployed, it will be found that 76.60 per cent of all breadwinners in tropical Australia are wage-earners, as against 76.27 per cent. for Australia as a whole.

SECTION 13.—CAUSE OF UNEMPLOYMENT (Table 9).

1. Causes Dealt With.—In the Census inquiry persons out of employment were asked to give the cause under one or other of the following heads :—(i) Scarcity of Employment ; (ii) Illness ; (iii) Accident ; (iv) Industrial Disputes ; (v) Old Age ; (vi) Other Causes. Of the 12,982 persons recorded as unemployed, 503—or 3.87 per cent.—failed to comply with this request.

2. Proportion Unemployed.—Adding the unemployed to those receiving wages and salary gives a total for the salary and wage earning class of 67,729, of whom 12,982, or 19.17 per cent., were unemployed, as against 9.6 per cent. for Australia.

3. Distribution of Causes.—For the two sexes combined, approximately 64 per cent of the unemployment was due to the scarcity of work, and 13½ per cent. was due to illness and accident. For the whole of Australia the proportions due to similar causes were—Scarcity of work, 50 per cent. ; and Sickness and Accident, 29 per cent.

SECTION 14.—DURATION OF UNEMPLOYMENT (Table 10).

1. Nature of Data.—In the instructions accompanying the Census slips unemployed persons, *i.e.*, persons who were out of work on Saturday, 2nd April, 1921, were asked to state the number of working days during which they had been unemployed. The tabulated results for the tropical areas are given in Table 10.

2. Duration of Unemployment.—The results in respect of specified duration may be conveniently grouped into four periods, viz. :—Under five weeks, 2,934 ; five and under ten weeks, 1,874 ; ten and under fifteen weeks, 1,789 ; fifteen weeks and over, 4,934. Of the total of 11,531 cases for which duration was specified, 25.45 per cent. were under five weeks ; 16.25 per cent. from five to ten weeks ; 15.51 per cent. from ten to fifteen weeks ; and 42.79 per cent. above fifteen weeks.

SECTION 15.—RELIGION (Table 11).

1. General.—Of the total persons in tropical Australia who gave definite information regarding their religion, 96.30 per cent. were Christians ; 2.65 per cent. were non-Christians ; and 1.05 per cent. were stated to have no religion. For Australia as a whole the number of non-Christians represented 0.67 per cent., and those stated to have no religion represented 0.39 per cent. The high proportion of non-Christians is due to the relatively large number in the tropical regions of Asiatic races who are followers of Buddha, Confucius, or Mohammed.

2. Christians.—As in the whole of Australia, the Church of England has the greatest number of adherents in the tropical parts. According to the Census of the 4th April, 1921, 45.36 per cent. of all Christians belonged to the Church of England as compared with 45.05 for Australia as a whole. Similarly, the Roman Catholic Church takes second place in both instances, though the proportion is much higher in the tropical parts, where it represents 27.85 per cent. of all Christians, as against 21.55 per cent. for Australia as a whole. Third in numerical order are the Presbyterians, who represent 12.48 per cent. in the tropics, and 12.11 in Australia. Next in order of numbers are the Methodists who, however, represent only 8.54 per cent. in the tropics, against 12.02 per cent. in Australia.

SECTION 16.—EDUCATION (Table 12).

1. General.—If the children under five years of age be omitted, together with those persons whose educational attainments were not stated, there remain 164,272 persons of whom 91.3 per cent. could read and write English, and a further 2.3 per cent. could read and write a foreign language, but not English. The number who could read English, but could not write it, was 646 persons, representing 39 per 10,000 of the population over five years ; and the number who could read a foreign language, but who could not write at all, was 112—or 7 per 10,000. Therefore, the number of persons over five years of age who could not read was 9,755—or 5.9 per cent.—as against 4.3 per cent. for Australia. The relatively high rate of illiteracy in the tropics was no doubt due to the isolation of many families in those regions.

SECTION 17.—SCHOOLING (Table 13).

1. General.—Of those receiving instruction on the 4th April, 1921, 76.0 per cent. were attending State schools ; 18.4 per cent. were at private schools ; and 5.6 were receiving instruction at home. The proportion receiving instruction at home was high in comparison with Australia as a whole, where it was only 3 per cent. This, again, was no doubt due to the isolation of many families. In common with the rest of Australia the greater part of the students at private schools are girls. In the tropical parts girls represented 57.0 per cent. of the pupils at private schools, whereas at the State schools girls represented only 48.2 per cent.

CENSUS RESULTS.

1. Tropical Australia, 4th April, 1921.—Ages of Population.

(Exclusive of full-blood Aboriginals.)

Age Last Birthday.	Queensland.			Western Australia.			Northern Territory.			Total.		
	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.
0– 4 ..	11,276	10,684	21,960	123	120	243	166	156	322	11,565	10,960	22,525
5– 9 ..	9,969	9,727	19,696	103	101	204	138	143	281	10,210	9,971	20,181
10–14 ..	8,385	8,194	16,579	57	58	115	87	91	178	8,529	8,343	16,872
15–19 ..	7,721	7,131	14,852	172	65	237	109	80	189	8,002	7,276	15,278
20–24 ..	8,779	7,598	16,377	722	66	788	186	89	275	9,687	7,753	17,440
25–29 ..	9,204	7,258	16,462	710	94	804	232	89	321	10,146	7,441	17,587
30–34 ..	9,086	6,227	15,313	584	79	663	263	72	335	9,933	6,378	16,311
35–39 ..	7,569	4,743	12,312	379	101	480	177	73	250	8,125	4,917	13,042
40–44 ..	6,449	3,830	10,279	454	101	555	201	53	254	7,104	3,984	11,088
45–49 ..	5,650	3,214	8,864	395	57	452	221	29	250	6,266	3,300	9,566
50–54 ..	5,623	2,867	8,490	399	38	437	267	27	294	6,289	2,932	9,221
55–59 ..	4,791	2,242	7,033	296	12	308	247	18	265	5,334	2,272	7,606
60–64 ..	3,782	1,716	5,498	172	10	182	216	9	225	4,170	1,735	5,905
65–69 ..	2,287	984	3,271	75	5	80	118	7	125	2,480	996	3,476
70–74 ..	1,261	614	1,875	29	3	32	49	2	51	1,339	619	1,958
75–79 ..	580	341	921	4	1	5	11	1	12	595	343	938
80–84 ..	296	183	479	5	..	5	2	1	3	303	184	487
85–89 ..	78	44	122	1	..	1	1	1	2	80	45	125
90–94 ..	18	3	21	1	..	1	..	..	..	19	3	22
95–99 ..	12	1	13	..	..	..	..	..	..	12	1	13
100 and over ..	..	..	..	..	..	..	..	..	..	..	..	..
Unspecified ..	702	278	980	90	9	99	67	75	142	859	362	1,221
Total ..	103,518	77,879	181,397	4,771	920	5,691	2,758	1,016	3,774	111,047	79,815	190,862
Under 21 ..	39,078	37,277	76,355	629	352	981	537	491	1,028	40,244	38,120	78,364
21 and over ..	63,738	40,324	104,062	4,052	559	4,611	2,154	450	2,604	69,944	41,333	111,277
Unspecified ..	702	278	980	90	9	99	67	75	142	859	362	1,221
Total ..	103,518	77,879	181,397	4,771	920	5,691	2,758	1,016	3,774	111,047	79,815	190,862

2. Tropical Australia, 4th April, 1921.—Length of Residence in Australia of Persons Born Outside Australia.

(Exclusive of full-blood Aboriginals.)

Number of Completed Years of Residence in Australia.	Queensland.			Western Australia.			Northern Territory.			Total.		
	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.
0 ..	704	358	1,062	1,051	8	1,059	16	3	19	1,771	369	2,140
1 ..	279	400	679	362	8	370	21	5	26	662	413	1,075
2 ..	116	79	195	71	5	76	5	26	31	192	110	302
3 ..	165	39	204	12	6	18	11	12	23	188	57	245
4 ..	202	66	268	12	10	22	14	2	16	228	78	306
5– 9 ..	4,852	2,329	7,181	161	37	198	131	34	165	5,144	2,400	7,544
10–14 ..	3,052	1,245	4,297	122	24	146	91	13	104	3,265	1,282	4,547
15–19 ..	953	329	1,282	75	7	82	42	7	49	1,070	343	1,413
20–24 ..	2,011	617	2,628	231	40	271	93	5	98	2,335	662	2,997
25–29 ..	1,435	535	1,970	194	32	226	59	17	76	1,688	584	2,272
30–34 ..	3,720	2,113	5,833	210	12	222	267	10	277	4,197	2,135	6,332
35–39 ..	4,864	2,896	7,760	130	5	135	176	13	189	5,170	2,914	8,084
40–44 ..	2,146	955	3,101	69	4	73	133	8	141	2,348	967	3,315
45–49 ..	1,517	775	2,292	32	5	37	33	1	34	1,582	781	2,363
50–54 ..	605	306	911	13	1	14	20	1	21	638	308	946
55–59 ..	718	481	1,199	10	..	10	12	2	14	740	483	1,223
60–64 ..	252	109	361	8	2	10	6	1	7	266	112	378
65–69 ..	162	83	245	4	1	5	3	1	4	169	85	254
70–74 ..	47	22	69	2	..	2	3	1	4	52	23	75
75–79 ..	24	7	31	..	1	1	..	..	..	24	8	32
80–84 ..	9	8	17	..	..	..	..	..	..	9	8	17
85–89 ..	4	..	4	..	..	..	..	..	..	4	..	4
90–94 ..	4	..	4	..	..	..	..	..	..	4	..	4
95–99 ..	..	..	..	..	..	..	..	..	..	..	..	..
100 and upwards ..	..	..	..	..	..	..	..	..	..	..	..	..
Unspecified ..	1,299	435	1,734	106	11	117	26	2	28	1,431	448	1,879
Total ..	29,140	14,187	43,327	2,875	219	3,094	1,162	164	1,326	33,177	14,570	47,747
Born in Australia	74,378	63,692	138,070	1,896	701	2,597	1,596	852	2,448	77,870	65,245	143,115
Grand Total	103,518	77,879	181,397	4,771	920	5,691	2,758	1,016	3,774	111,047	79,815	190,862

3. Tropical Australia, 4th April, 1921.—Conjugal Condition of the Population.

(Exclusive of full-blood Aboriginals.)

Conjugal Condition.	Queensland.			Western Australia.			Northern Territory.			Total.		
	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.
Never Married—												
Under Age 15	29,630	28,605	58,235	283	279	562	391	390	781	30,304	29,274	59,578
Age 15 and over	38,406	16,180	54,586	3,356	189	3,545	1,509	153	1,662	43,271	16,522	59,793
Total Never Married ..	68,036	44,785	112,821	3,639	468	4,107	1,900	543	2,443	73,575	45,796	119,371
Married ..	32,001	28,723	60,724	951	410	1,361	693	367	1,060	33,645	29,500	63,145
Widowed ..	2,857	4,180	7,037	116	37	153	84	33	117	3,057	4,250	7,307
Divorced ..	89	35	124	9	4	13	5	..	5	103	39	142
Unspecified ..	535	156	691	56	1	57	76	73	149	667	230	897
Total ..	103,518	77,879	181,397	4,771	920	5,691	2,758	1,016	3,774	111,047	79,815	190,862

4. Tropical Australia, 4th April, 1921.—Birthplaces of the Population.

(Exclusive of full-blood Aboriginals.)

Birthplace.	Queensland.			Western Australia.			Northern Territory.			Total.		
	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.
Australasia—												
Australia ..	74,378	63,692	138,070	1,896	701	2,597	1,596	852	2,448	77,870	65,245	143,115
New Zealand ..	564	209	773	52	8	60	36	5	41	652	222	874
Other (*a*) ..	141	19	160	1	..	1	..	..	..	142	19	161
Total Australasia	75,083	63,920	139,003	1,949	709	2,658	1,632	857	2,489	78,664	65,486	144,150
Europe—												
British Isles ..	17,891	11,917	29,808	578	105	683	334	73	407	18,803	12,095	30,898
Denmark ..	508	177	685	16	1	17	8	2	10	532	180	712
France ..	80	34	114	4	3	7	1	..	1	85	37	122
Germany ..	963	410	1,373	24	..	24	12	2	14	999	412	1,411
Greece ..	329	39	368	39	15	54	48	28	76	416	82	498
Italy ..	1,150	364	1,514	6	..	6	11	..	11	1,167	364	1,531
Norway ..	163	65	228	31	..	31	9	..	9	203	65	268
Russia ..	295	119	414	7	..	7	9	..	9	311	119	430
Sweden ..	269	44	313	26	..	26	11	..	11	306	44	350
Switzerland ..	105	21	126	5	..	5	4	..	4	114	21	135
Other ..	809	152	961	24	..	24	18	4	22	851	156	1,007
Total Europe	22,562	13,342	35,904	760	124	884	465	109	574	23,787	13,575	37,362
Asia—												
British India ..	298	35	333	57	..	57	10	..	10	365	35	400
China ..	2,441	28	2,469	219	1	220	457	18	475	3,117	47	3,164
Japan ..	935	38	973	992	73	1,065	32	2	34	1,959	113	2,072
Syria ..	39	29	68	1	..	1	..	..	..	40	29	69
Other ..	604	38	642	693	4	697	108	11	119	1,405	53	1,458
Total Asia ..	4,317	168	4,485	1,962	78	2,040	607	31	638	6,886	277	7,163
Africa—												
Union of South Africa ..	72	43	115	3	1	4	2	3	5	77	47	124
Other ..	57	16	73	3	1	4	5	6	11	65	23	88
Total Africa ..	129	59	188	6	2	8	7	9	16	142	70	212
America—												
Canada ..	147	30	177	7	1	8	5	1	6	159	32	191
Unites States of America ..	181	60	241	12	..	12	12	..	12	205	60	265
Other ..	74	23	97	10	..	10	9	6	15	93	29	122
Total America	402	113	515	29	1	30	26	7	33	457	121	578
Polynesia ..	558	68	626	5	..	5	7	1	8	570	69	639
At Sea ..	81	51	132	2	2	4	3	1	4	86	54	140
Unspecified ..	386	158	544	58	4	62	11	1	12	455	163	618
Total ..	103,518	77,879	181,397	4,771	920	5,691	2,758	1,016	3,774	111,047	79,815	190,862

(*a*) Includes Norfolk Island, Papua, and the Territory of New Guinea.

5. Tropical Australia, 4th April, 1921.—Nationality (i.e., Allegiance) of the Population.

(Exclusive of full-blood Aboriginals.)

Nationality.	Queensland.			Western Australia.			Northern Territory.			Total.		
	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.
British ..	97,853	77,358	175,211	2,825	833	3,658	2,108	956	3,064	102,786	79,147	181,933
Foreign—												
Austrian ..	20	1	21	2	..	2	..	..	..	22	1	23
Belgian ..	2	1	3	1	..	1	..	..	..	3	1	4
Bulgarian ..	4	..	4	..	..	..	..	..	..	4	..	4
Chinese ..	2,320	15	2,335	218	1	219	448	18	466	2,986	34	3,020
Czecho-Slovakian	9	1	10	..	..	..	..	..	..	9	1	10
Danish ..	95	20	115	4	..	4	3	1	4	102	21	123
Dutch ..	211	13	224	472	..	472	33	1	34	716	14	730
Finnish ..	27	1	28	3	..	3	..	..	..	30	1	31
French ..	62	19	81	4	1	5	4	..	4	70	20	90
German ..	241	45	286	11	..	11	5	1	6	257	46	303
Greek ..	258	33	291	31	12	43	40	27	67	329	72	401
Hungarian ..	3	2	5	..	..	..	1	..	1	4	2	6
Italian ..	623	127	750	3	..	3	5	..	5	631	127	758
Japanese ..	930	37	967	988	71	1,059	33	2	35	1,951	110	2,061
Jugo-Slavian ..	34	5	39	1	..	1	..	..	..	35	5	40
Norwegian ..	39	6	45	17	..	17	4	..	4	60	6	66
Polish ..	17	3	20	1	..	1	2	..	2	20	3	23
Russian ..	247	95	342	4	..	4	7	..	7	258	95	353
Spanish ..	127	40	167	4	..	4	6	4	10	137	44	181
Swedish ..	72	6	78	14	..	14	8	..	8	94	6	100
Swiss ..	32	5	37	3	..	3	3	..	3	38	5	43
Turkish ..	3	3	6	..	..	..	..	..	..	3	3	6
United States of America ..	141	17	158	96	..	96	39	..	39	276	17	293
Other ..	85	9	94	35	..	35	7	5	12	127	14	141
Total Foreign	5,602	504	6,106	1,912	85	1,997	648	59	707	8,162	648	8,810
Unspecified ..	63	17	80	34	2	36	2	1	3	99	20	119
GRAND TOTAL	103,518	77,879	181,397	4,771	920	5,691	2,758	1,016	3,774	111,047	79,815	190,862

6. Tropical Australia, 4th April, 1921.—Population According to Race.

(Exclusive of full-blood Aboriginals.)

Race.	Queensland.			Western Australia.			Northern Territory.			Total.		
	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.
European ..	96,704	76,019	172,723	2,745	769	3,514	1,785	616	2,401	101,234	77,404	178,638
Non-European Full blood—												
Afghan ..	7	..	7	8	..	8	..	..	..	15	..	15
Chinese ..	2,585	170	2,755	255	18	273	609	113	722	3,449	301	3,750
Cingalese ..	71	4	75	9	2	11	8	3	11	88	9	97
Hindu ..	212	8	220	40	..	40	6	2	8	258	10	268
Japanese ..	948	46	994	1,001	83	1,084	33	3	36	1,982	132	2,114
Malay ..	326	78	404	548	6	554	14	6	20	888	90	978
Negro ..	18	5	23	1	..	1	2	..	2	21	5	26
Polynesian ..	1,034	433	1,467	4	..	4	2	1	3	1,040	434	1,474
Syrian ..	71	59	130	..	..	..	..	..	..	71	59	130
Other ..	390	135	525	138	13	151	99	25	124	627	173	800
Total Full-blood	5,662	938	6,600	2,004	122	2,126	773	153	926	8,439	1,213	9,652
Half-caste—												
Australian Aboriginal ..	648	556	1,204	17	22	39	190	235	425	855	813	1,668
Chinese ..	275	217	492	3	7	10	5	3	8	283	227	510
Hindu ..	12	7	19	1	..	1	1	1	2	14	8	22
Japanese ..	12	10	22	..	..	..	..	..	..	12	10	22
Malay ..	35	27	62	..	..	..	..	..	..	35	27	62
Negro ..	14	2	16	..	..	..	..	..	..	14	2	16
Polynesian ..	74	47	121	..	..	..	..	..	..	74	47	121
Syrian ..	10	7	17	..	..	..	..	..	..	10	7	17
Other ..	72	49	121	1	..	1	4	8	12	77	57	134
Total Half-caste	1,152	922	2,074	22	29	51	200	247	447	1,374	1,198	2,572
GRAND TOTAL	103,518	77,879	181,397	4,771	920	5,691	2,758	1,016	3,774	111,047	79,815	190,862

7. Tropical Australia, 4th April, 1921.—Occupations of the Population.

(Exclusive of full-blood Aboriginals.)

Class of Occupation.	Queensland.			Western Australia.			Northern Territory.			Total.		
	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.
I. *Professional* ..	3,073	2,299	5,372	121	51	172	117	33	150	3,311	2,383	5,694
II. *Domestic* ..	1,954	5,779	7,733	225	126	351	106	98	204	2,285	6,003	8,288
III. *Commercial*	7,370	1,654	9,024	196	16	212	178	4	182	7,744	1,674	9,418
IV. *Transport and Communication*—												
On Railways ..	3,229	86	3,315	26	..	26	45	..	45	3,300	86	3,386
On Roads ..	2,018	17	2,035	92	..	92	36	..	36	2,146	17	2,163
On Seas and Rivers	2,556	23	2,579	203	..	203	96	..	96	2,855	23	2,878
Post and Telegraph	825	92	917	77	2	79	77	2	79	979	96	1,075
Other	29	..	29	..	..	..	..	..	..	29	..	29
Total Transport and Communication	8,657	218	8,875	398	2	400	254	2	256	9,309	222	9,531
V. *Industrial*—												
Manufacturing ..	8,720	1,172	9,892	279	22	301	163	7	170	9,162	1,201	10,363
Building ..	1,936	8	1,944	51	..	51	45	..	45	2,032	8	2,040
Earthworks ..	1,854	2	1,856	35	..	35	27	..	27	1,916	2	1,918
Disposal of Dead and Refuse ..	386	2	388	..	..	..	10	..	10	396	2	398
Undefined Industrial ..	7,348	23	7,371	125	..	125	189	2	191	7,662	25	7,687
Total Industrial	20,244	1,207	21,451	490	22	512	434	9	443	21,168	1,238	22,406
VI. *Primary Producers*—												
Agricultural ..	12,998	90	13,088	46	..	46	82	..	82	13,126	90	13,216
Pastoral ..	10,933	162	11,095	1,098	4	1,102	662	..	662	12,693	166	12,859
Trapping, &c. ..	175	1	176	17	..	17	3	..	3	195	1	196
Fisheries ..	1,043	5	1,048	1,629	3	1,632	62	..	62	2,734	8	2,742
Forestry ..	1,193	2	1,195	14	..	14	10	..	10	1,217	2	1,219
Water Supply ..	364	2	366	18	..	18	7	..	7	389	2	391
Mining and Quarrying	4,701	5	4,706	224	..	224	388	..	388	5,313	5	5,318
Total Primary Producers ..	31,407	267	31,674	3,046	7	3,053	1,214	..	1,214	35,667	274	35,941
VII. *Independent*	329	136	465	1	..	1	1	..	1	331	136	467
Total Breadwinners ..	73,034	11,560	84,594	4,477	224	4,701	2,304	146	2,450	79,815	11,930	91,745
VIII. *Dependants*	29,918	66,260	96,178	279	695	974	371	834	1,205	30,568	67,789	98,357
Unspecified ..	566	59	625	15	1	16	83	36	119	664	96	760
GRAND TOTAL	103,518	77,879	181,397	4,771	920	5,691	2,758	1,016	3,774	111,047	79,815	190,862

8. Tropical Australia, 4th April, 1921.—Grade of Employment.

(Exclusive of full-blood Aboriginals.)

Grade.	Queensland.			Western Australia.			Northern Territory.			Total.		
	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.
Employer ..	4,735	377	5,112	188	8	196	94	..	94	5,017	385	5,402
Working on own account ..	12,112	1,116	13,228	601	35	636	566	13	579	13,279	1,164	14,443
Assisting, but not receiving wages or salary ..	740	85	825	2	..	2	10	..	10	752	85	837
Receiving wages or salary ..	41,236	8,677	49,913	3,321	147	3,468	1,243	123	1,366	45,800	8,947	54,747
Unemployed ..	11,628	715	12,343	292	5	297	339	3	342	12,259	723	12,982
Grade not applicable ..	32,259	66,772	99,031	324	723	1,047	425	877	1,302	33,008	68,372	101,380
Grade not stated	808	137	945	43	2	45	81	..	81	932	139	1,071
Total ..	103,518	77,879	181,397	4,771	920	5,691	2,758	1,016	3,774	111,047	79,815	190,862

9. Tropical Australia, 4th April, 1921.—Causes of Unemployment.

(Exclusive of full-blood Aboriginals.)

Cause of Unemployment.	Queensland.			Western Australia.			Northern Territory.			Total.		
	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.
Scarcity of employment ..	7,255	302	7,557	174	2	176	237	1	238	7,666	305	7,971
Illness ..	1,148	234	1,382	38	1	39	25	..	25	1,211	235	1,446
Accident ..	210	6	216	9	1	10	1	..	1	220	7	227
Industrial dispute	244	5	249	..	..	..	..	..	..	244	5	249
Old age ..	141	1	142	1	..	1	10	..	10	152	1	153
Other causes ..	2,182	129	2,311	60	1	61	59	2	61	2,301	132	2,433
Cause not stated	448	38	486	10	..	10	7	..	7	465	38	503
Total ..	11,628	715	12,343	292	5	297	339	3	342	12,259	723	12,982

10. Tropical Australia, 4th April, 1921.—Duration of Unemployment.

(Exclusive of full-blood Aboriginals.)

Duration of Unemployment in Working Days.	Queensland.			Western Australia.			Northern Territory.			Total.		
	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.
Under 10 ..	903	97	1,000	26	1	27	19	1	20	948	99	1,047
10–19	842	82	924	26	..	26	17	1	18	885	83	968
20–29	811	65	876	24	1	25	18	..	18	853	66	919
30–39	760	51	811	31	..	31	16	..	16	807	51	858
40–49	490	41	531	16	..	16	10	..	10	516	41	557
50–59	427	24	451	6	..	6	2	..	2	435	24	459
60–69	643	28	671	16	1	17	18	1	19	677	30	707
70–79	607	22	629	8	1	9	8	..	8	623	23	646
80–89	405	15	420	4	..	4	12	..	12	421	15	436
90 and over ..	4,466	170	4,636	106	..	106	192	..	192	4,764	170	4,934
Unspecified ..	1,274	120	1,394	29	1	30	27	..	27	1,330	121	1,451
Total ..	11,628	715	12,343	292	5	297	339	3	342	12,259	723	12,982

11. Tropical Australia, 4th April, 1921.—Religions of the Population.

(Exclusive of full-blood Aboriginals.)

Religion.	Queensland.			Western Australia.			Northern Territory.			Total.		
	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.
Christian.												
Baptist ..	910	916	1,826	14	6	20	20	6	26	944	928	1,872
Catholic, Roman	25,901	21,447	47,348	742	241	983	500	193	693	27,143	21,881	49,024
Catholic, Undefined	942	695	1,637	35	5	40	6	5	11	983	705	1,688
Church of Christ	93	90	183	6	2	8	4	1	5	103	93	196
Church of England	43,134	33,904	77,038	1,286	399	1,685	802	309	1,111	45,222	34,612	79,834
Congregational .. / Independent ..	275	227	502	25	8	33	8	1	9	308	236	544
Lutheran ..	592	188	780	36	..	36	26	7	33	654	195	849
Methodist ..	7,465	7,299	14,764	68	26	94	105	67	172	7,638	7,392	15,030
Presbyterian ..	11,895	9,382	21,277	339	91	430	193	70	263	12,427	9,543	21,970
Protestant, Undefined ..	1,319	740	2,059	74	14	88	3	1	4	1,396	755	2,151
Salvation Army..	500	553	1,053	5	..	5	2	..	2	507	553	1,060
Seventh Day Adventists ..	113	141	254	..	..	..	1	1	2	114	142	256
Unitarian ..	20	7	27	1	..	1	..	..	..	21	7	28
Other Christian ..	852	462	1,314	53	24	77	68	48	116	973	534	1,507
Christian, Undefined ..	71	50	121	7	1	8	3	2	5	81	53	134
Total Christian	94,082	76,101	170,183	2,691	817	3,508	1,741	711	2,452	98,514	77,629	176,143
Non-Christian.												
Buddhist ..	473	32	505	944	54	998	50	2	52	1,467	88	1,555
Chinese ..	588	17	605	89	..	89	13	..	13	690	17	707
Confucian ..	357	8	365	82	..	82	516	91	607	955	99	1,054
Hebrew ..	61	24	85	13	2	15	1	..	1	75	26	101
Mohammedan ..	388	62	450	584	4	588	26	..	26	998	66	1,064
Others, Non-Christian ..	271	36	307	25	10	35	24	9	33	320	55	375
Total Non-Christian ..	2,138	179	2,317	1,737	70	1,807	630	102	732	4,505	351	4,856
Indefinite ..	646	80	726	46	5	51	29	8	37	721	93	814
No Religion ..	1,404	217	1,621	75	10	85	137	59	196	1,616	286	1,902
Object to State ..	1,703	558	2,261	30	3	33	64	14	78	1,797	575	2,372
No Reply ..	3,545	744	4,289	192	15	207	157	122	279	3,894	881	4,775
GRAND TOTAL	103,518	77,879	181,397	4,771	920	5,691	2,758	1,016	3,774	111,047	79,815	190,862

12. Tropical Australia, 4th April, 1921.—Education of the Population.

(Exclusive of full-blood Aboriginals.)

Particulars.	Queensland.			Western Australia.			Northern Territory.			Total.		
	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.
Cannot Read—												
Under 5 years of age ..	11,276	10,684	21,960	123	120	243	166	156	322	11,565	10,960	22,525
Over 5 years of age ..	5,750	2,997	8,747	288	70	358	470	180	650	6,508	3,247	9,755
English Language—												
Read and Write	81,525	62,537	144,062	2,963	648	3,611	1,727	549	2,276	86,215	63,734	149,949
Read only ..	364	258	622	13	4	17	6	1	7	383	263	646
Foreign Language only—												
Read and Write	2,408	293	2,701	730	54	784	289	36	325	3,427	383	3,810
Read only ..	81	18	99	9	1	10	2	1	3	92	20	112
Unspecified ..	2,114	1,092	3,206	645	23	668	98	93	191	2,857	1,208	4,065
GRAND TOTAL	103,518	77,879	181,397	4,771	920	5,691	2,758	1,016	3,774	111,047	79,815	190,862

13. Tropical Australia, 4th April, 1921.—Schooling—Population Recorded as Receiving Instruction at Date of Census.

(Exclusive of full-blood Aboriginals.)

Receiving Instruction at—	Queensland.			Western Australia.			Northern Territory.			Total.		
	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.
State School ..	13,026	12,132	25,158	89	83	172	118	120	238	13,233	12,335	25,568
Private School ..	2,615	3,464	6,079	21	20	41	19	39	58	2,655	3,523	6,178
Home ..	832	950	1,782	23	24	47	22	25	47	877	999	1,876
University ..	8	2	10	..	..	..	..	..	..	8	2	10
Unspecified ..	1,346	1,232	2,578	23	18	41	31	17	48	1,400	1,267	2,667
Total ..	17,827	17,780	35,607	156	145	301	190	201	391	18,173	18,126	36,299

CHAS H. WICKENS,
Commonwealth Statistician

Commonwealth Bureau of Census and Statistics,
Melbourne, 26th November, 1923.

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